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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/534,474 03/24/00 WOODS

D W00001

EXAMINER

TM02/0809

THE LAW OFFICE OF EVERETT G. DIEDERIKS J
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1 AD.1

ART UNIT

PAPER NUMBER

2673

DATE MAILED:

08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

091534, 474

Applicant(s)

Debra L. Woods

Examiner

LAO, LUN- YI

Group Art Unit

2673

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 7/11/01
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1 - 20 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1 - 20 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Weeks(5,880,685).

As to claims 7 and 10, Weeks teaches a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figure 1; column 4, lines 35-54). The keys includes letter keys, a tab key, a backspace key(80, 82) and a function key(23, 24), wherein both tab and backspace keys(80, 82) are centrally located within the letter keys(see figure 1; column 5, lines 20-40 and column 7, lines 14-23).

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 13, 14, 15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Motoyama et al(5,818,357).

Russo teaches a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figures 1, 13, 16; column 4, lines 55-68 and column 5, lines 1-6). The keys includes letter keys, a tab key, a backspace key and a function key, wherein both tab(233, 234) and backspace keys(232) are centrally located within the array(see figures 2, 13 and 16).

Weeks fails fails to disclose shift keys can be operated by a user's thumbs and fails to disclose at least two multi-letter words would be come out when read one of rows of selected letter keys from left to right.

Motoyama et al teach a keyboard comprising shift keys(K1) which is operated by a user's thumbs(see figure 3A). It would have been obvious to have modified Weeks with the teaching of Motoyama et al, since the function of a key would not be modified by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

As to claims 13, 14, 15 and 19, Russo teaches a plurality of shift keys(142, 148, 136, 150, 138 or 242, 236, 238, 250 and 248) located in a lower central portion of the array(see figures 1, 2, 13, 16; column 5, lines 2-6 and lines 63-64; and column 9, lines 4-42).

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As to claim 16, the plurality of shift keys(142, 148, 136, 150, 138 or 242, 236, 238, 250, 248) are arranged in two different rows on the keyboard(110)(see figures 1, 2, 13 and 16).

As to claim 18, Russo teaches two(148, 150 or 248, 250) of least three separate shift keys perform identical function(see figures 1, 2, 13, 16 and column 9, lines 4-42).

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Motoyama et al(5,818,357) and Wakatsuki et al(5,065,003).

Russo as modified fail to teach a scroll key(Scroll Lock Key) above the shift keys(236, 248, 250)(see figure 13).

Russo fails to teach a scroll button located directly adjacent at least one of shift keys.

Wakatsuki et al teach a scroll button(3c) located directly adjacent a shift key(3b)(see figures 1A, 1B and column 4, lines 60-68). It would have been obvious to have modified Russo as modified with the teaching of Wakatsuki, since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Motoyama et al(5,818,357) and Maynard et al(5,557,299).

Russo as modified fail to disclose shift keys are color coded.

Maynard et al teach a keyboard having a color code(Green, Red, Blue, Yellow)(see figure 5; column 5, lines 57-68 and column 6, lines 1-36). It would have been obvious to have modified

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Russo as modified with the teaching of Maynard et al, so a user can first easily locate the type of key by its color(see column 5, lines 65-68 and column 6, line 1).

7. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weeks(5,880,685) in view of Motoyama et al(5,818,357) and Choate(5,352,050).

As to claims 1-6, Weeks teaches a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figure 1; column 4, lines 35-54). The keys includes letter keys, a tab key, a backspace key(80, 82) and a function key(23, 24), wherein both tab and backspace keys(80, 82) are centrally located within the letter keys(see figure 1; column 5, lines 20-40 and column 7, lines 14-23).

Weeks fails to disclose shift keys can be operated by a user's thumbs and fails to disclose at least two multi-letter words would be come out when read one of rows of selected letter keys from left to right.

Motoyama et al teach a keyboard comprising shift keys(K1) which is operated by a user's thumbs(see figure 3A). It would have been obvious to have modified Weeks with the teaching of Motoyama et al, since the function of a key would not be modified by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

Choate teaches a keyboard having tow multi-letter words(I H O T) came out when read one of rows of selected letter keys from left to right(see figure 2). It would have been obvious to have modified Weeks as modified with the teaching of Choate, since the function of a key would

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not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

8. Claims 8-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weeks(5,880,685) in view of Chen(5,739,776).

Weeks fails to disclose a tab key is located on the left or same row of the backspace key.

At to claims 8-9 and 11-12, Chen teaches a keyboard comprising a tap key(15) same row to a backspace key(16)(see figures 1, 4 and column 2, lines 39-49). It would have been obvious to have modified Russo with the teaching of Chen, since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

As to claim 9, it would have been obvious to have a tab key mounted on the left side of the backspace key since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iwasa et al(5,560,724) teach a keyboard having a plurality of shift keys.

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Montgomery(4,221,497) teaches a keyboard having keys having digraphs(tu, in, is, etc.) and trigrams(the, and ing, ent, ion, etc.) carrying individual words or characters used frequently in sequence are positioned adjacent one another.

MacWeek teaches a keyboard uses a configurable design that allows users to purchase different modules and set them up on the keyboard in the arrangement that best suits their work habits.

10. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Choate does not teach the referenced row of letter keys to spell out at least two multi-letter words;e.g. "READ ON THIS" on page 2. However, Choate has disclosed the positions of keys can be rearranged(see figures 2-6 and column 6, lines 17-63). It would have been obvious to arranged keys in a row of keyboard to carry sets of words; e.g. "READ ON THIS" that best suits a user's habits or requirement since such modification would not be effected the function of a key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 872-9314 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

13. Any inquiry concerning this communication should be directed to Lun-yi, Lao at telephone number (703) 305-4873.

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August 7, 2001

Lun Yi Lao

Lun-Yi Lao
Primary Examiner